DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-027895 Address: 333 Burma Road **Date Inspected:** 02-Jul-2012

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1930 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: CWI Present: Yes No As noted below. **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No

N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No

Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: Tower Component**

Summary of Items Observed:

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

Ultrasonic Testing of ESW

ESW C:

This QA performed Ultrasonic Testing (UT) on approximately 3857mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as "ESW C" face A. Location (Y=6000~9857) of this weld was inspected using this testing method.

This weld was previously accepted by QC Ultrasonic technicians in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R5.

This QA observed no recordable or rejectable indications at the time of testing.

ESW G:

This QA performed Ultrasonic Testing (UT) on approximately 1850mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as "ESW G" face A. Location (Y=150~2000) of this weld was inspected using this testing method.

This weld was previously accepted by QC Ultrasonic technicians in accordance with supplemental procedure SE-UT-D1.5-CT-108-ESW-R4.

This QA observed one (1) recordable indication at the time of testing. This QA generated a TL-6027 UT report on this date.

N/A

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

The following indications were observed as having a transverse orientation. Due to joint configuration and weld cap shape these indications could not be evaluated for length or "X" location.

Indication #1: Y = 260mm

Sizing – A = 77db, B = 54.db, C = 5db, D = 18db

Sound Path= 95.02mm, Depth= 32.5mm

Indication #2: Y = 380mm

Sizing – A= 77db, B= 54db, C= 7db, D= 16db

Sound Path= 118.4, Depth= 40.52mm

Indication #3: Y= 840mm

Sizing – A= 80db, B= 54db, C= 7db, D= 19db

Sound Path= 116mm, Depth= 39.68mm

Indication #4: Y = 975mm

Sizing – A = 81db, B = 54db, C = 7db, D = 20db

Sound Path= 111.3mm, Depth= 38.06mm

Indication #5: Y= 1485mm

Sizing – A= 68.5db, B= 54db, C=8db, D= 6db

Sound Path= 130.91mm, Depth= 44.79mm

Indication #6: Y= 1590mm

Sizing – A= 75.5db, B= 54db, C=5db, D= 16db

Sound Path= 93.14mm, Depth= 31.85mm

Indication #7: Y= 1680mm

Sizing – A = 76.5 db, B = 54 db, C = 5 db, D = 17 db

Sound Path= 85.65mm, Depth= 29.29mm

Indication #8: Y= 1715mm

Sizing – A= 82.5db, B= 54db, C=5db, D= 23db

Sound Path= 88.73mm, Depth= 30.34mm

Note: This location appeared to be a grouping of two (2) or more transverse indications.

Indication #5: Y= 1850mm

Sizing – A= 73db, B= 54db, C=6db, D= 13db

Sound Path= 105.5mm, Depth= 36.08mm

This QA performed UT of welds designated as ESW C and ESW G in accordance with the approved supplemental procedure. This testing was performed in tandem with QC technician Scott Kortum.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Conversations were relevant to testing performed.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford, William	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer